

Virginia Regulatory Town Hall

Periodic Review of Existing Regulations Agency Background Document

Agency Name:	State Air Pollution Control Board
Regulation Title:	Regulations for the Control and Abatement of Air Pollution
Subtitle:	Ambient Air Quality Standards
VAC Number:	9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.)
Date:	

This information is required pursuant to the Administrative Process Act § 9-6.14:25 and Executive Order Twenty-Five (98) which outline procedures for periodic review of regulations of agencies within the executive branch. Each existing regulation is to be reviewed at least once every three years and measured against the specific public health, safety, and welfare goals assigned by agencies during the promulgation process.

Summary

Please provide a brief summary of the regulation and its purpose. There is no need to state each provision, instead give a general description of the regulation.

The regulation establishes primary and secondary standards for emissions of those air pollutants for which federal air quality criteria have been issued. The purpose of the primary standards is to protect public health; the purpose of the secondary standards is to protect public welfare. The standards are as follows:

pollutant	primary standard	secondary standard
sulfur oxides	0.03 ppm annual arithmetic mean 0.14 ppm maximum 24-hr. concentration	0.50 ppm maximum 3-hr. concentration
carbon monoxide	9 ppm average 8-hr. concentration	35 ppm average 1-hr. concentration
ozone	0.12 ppm	0.12 ppm
particulate matter (PM ₁₀)	50 µg/m ³ annual arithmetic mean 150 µg/m ³ average 24-hr. concentration	50 µg/m ³ annual arithmetic mean 150 µg/m ³ average 24-hr. concentration
nitrogen dioxide	0.053 ppm annual arithmetic mean	0.053 ppm annual arithmetic mean
lead	1.5 µg/m ³ maximum arithmetic mean	1.5 µg/m ³ maximum arithmetic mean

Legal Requirements

Please identify the state and/or federal source of the legal requirements that necessitate promulgation of the regulation. The discussion of these requirements should include a description of their scope and the extent to which the requirements are mandatory or discretionary. Full citations for the legal requirements and, if available, web site addresses for locating the text of the cited legal provisions should be provided.

Federal Requirements

Federal Clean Air Act (CAA):

<http://www.epa.gov/ttn/oarpg/gener.html>

Code of Federal Regulations (CFR):

<http://www.access.gpo.gov/nara/cfr/cfr-retrieve.html>

Federal Register (FR):

http://www.gpo.gov/su_docs/aces/aces140.html

Sections 109 (a) and (b) of the Clean Air Act require EPA to prescribe national primary air quality standards (to protect public health) and national secondary air quality standards (to protect public welfare) for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. The primary and secondary air quality criteria are authorized for promulgation under CAA section 108. The criteria for each pollutant

shall include, to the extent practicable, information on the following: (1) variables which may adversely affect the impact of an air pollutant on public health or welfare; (2) pollutants which may interact with other pollutants to produce an adverse effect on public health or welfare; and (3) any known or anticipated adverse effects on public health or welfare.

Section 302 (h) defines effects on public welfare as including, but not limited to, effects on soils, water, vegetation, man-made materials, animals, weather, visibility. Also included are damage to and deterioration of property, hazards to transportation, and adverse effects on economic values, personal comfort, and well-being.

40 CFR Part 50 specifies the national primary and secondary ambient air quality standards for the following criteria air pollutants: sulfur dioxide, particulate matter (PM₁₀), carbon monoxide, ozone, nitrogen dioxide, and lead. In addition, since section 302 (g) of the CAA specifies that the term "air pollutant" includes precursors to the formation of any air pollutant, volatile organic compounds (hydrocarbons) are generically classed as a criteria air pollutant because of their function as a precursor in ozone formation.

Appendices A through J to 40 CFR Part 50 specify reference methods for measuring the following criteria air pollutants in the atmosphere or in the ambient air: sulfur dioxide, suspended particulate matter, carbon monoxide, ozone, hydrocarbons corrected for methane, nitrogen dioxide, lead in suspended particulate matter, and particulate matter (PM₁₀).

Appendices H and K to 40 CFR Part 50 interpret the National Ambient Air Quality Standards for two criteria air pollutants: ozone and particulate matter.

Subparts A through D of 40 CFR Part 53 specify ambient air monitoring reference and equivalent methods, specifically procedures for testing performance characteristics of automated methods for sulfur dioxide, carbon monoxide, ozone, particulate matter (PM₁₀), and nitrogen dioxide; and procedures for determining comparability between candidate methods and reference methods.

40 CFR Part 58 specifies procedures for ambient air quality surveillance, specifically monitoring criteria; state and local air monitoring stations (SLAMS); national air monitoring stations (NAMS); photochemical assessment monitoring stations (PAMS); air quality index reporting; and federal monitoring.

State Requirements

Code of Virginia:

<http://leg1.state.va.us/000/cod/codec.htm>

Virginia Administrative Code (VAC):

<http://leg1.state.va.us/000/reg/toc.htm>

Code of Virginia § 10.1-1307 A provides that the board may, among other activities, develop a comprehensive program for the study, abatement, and control of all sources of air pollution in the Commonwealth.

Code of Virginia § 10.1-1308 provides that the board shall have the power to promulgate regulations abating, controlling, and prohibiting air pollution throughout or in any part of the Commonwealth in accordance with the provisions of the Administrative Process Act.

Comparison with Statutory Requirements

No provision of the regulation exceeds the specific minimum requirements of any legally binding state or federal mandate. An explanation as to how this conclusion was reached is set forth below.

The agency performed an analysis to determine if statutory mandates justify continuation of the regulation. The analysis revealed that statutory justification does exist for the regulation. The regulation was adopted in order to implement the policy set forth in the Virginia Air Pollution Control Law and to fulfill the Commonwealth's responsibilities under the Federal Clean Air Act to provide a legally enforceable State Implementation Plan for the control of criteria pollutants. These statutes still remain in force with the provisions that initiated adoption of the regulation still intact.

Analysis reveals that the regulation is consistent with applicable state and federal regulations, statutory provisions, and judicial decisions. Factors and circumstances (federal statutes, original intent, state air quality program and air pollution control methodology and technology) which justified the initial issuance of the regulation have not changed to a degree that would justify a change to the basic requirements of the regulation.

Public Comment

Please summarize all public comment received as the result of the Notice of Periodic Review published in the Virginia Register and provide the agency response. If no public comment was received, please include a statement indicating that fact

No public input was received during the public comment period for this periodic review.

Effectiveness

Please provide a description of the specific and measurable regulatory goals of the regulation. Detail the effectiveness of the regulation in achieving such goals.

The regulation has been effective in achieving its specific and measurable goals, which are as follows:

1. To protect public health and welfare with the least possible cost and intrusiveness to the citizens and businesses of the Commonwealth.
2. To define levels of air quality which, allowing an adequate margin of safety, are necessary to protect the public health.
3. To define more stringent levels of air quality which are necessary to protect the public welfare from any known or anticipated adverse effects associated with the presence of air pollutants in the ambient air.

Need

Please provide the specific reasons the agency has determined that the regulation is essential to protect the health, safety or welfare of citizens or is essential for the efficient and economical performance of an important governmental function. Include a discussion of the problems the regulation's provisions are intended to solve.

Among the primary goals of the federal Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS.

The NAAQS, developed and promulgated by the U.S. Environmental Protection Agency (EPA), establish the maximum limits of pollutants that are permitted in the outside ambient air. EPA requires that each state submit a plan (called a State Implementation Plan or SIP), including any laws and regulations necessary to enforce the plan, that shows how the air pollution concentrations will be reduced to levels at or below these standards (attainment). Once the pollution levels are within the standards, the SIP must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (maintenance).

A SIP is the key to the state's air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards--that is, it would have to promulgate and implement an air quality plan for that state. EPA is also, by law, required to impose sanctions in cases where there is no approved plan or the plan is not being implemented, the sanctions consisting of loss of federal funds for highways and other projects and/or more restrictive requirements for new industry. Generally, the plan is revised, as needed, based upon changes in the federal Clean Air Act and its requirements.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The regulation is needed in order to fulfill the Commonwealth's responsibilities under the Federal Clean Air Act to provide a legally enforceable SIP for the control of criteria pollutants. Some provisions of the SIP require owners of air pollution sources to demonstrate compliance with the NAAQS; in other cases, the NAAQS provide a basis for determining the degree to which the Commonwealth's air quality meets the goals of the SIP.

Alternatives

Please describe the process by which the agency has considered, or will consider, less burdensome and less intrusive alternatives for achieving the need. Also describe, to the extent known, the specific alternatives that have been considered and will be considered to meet the need, and the reasoning by which the agency has rejected any of the alternatives considered.

Alternatives have been considered by the Department to meet the need. The Department has determined that retention of the regulation (the first alternative) is appropriate, as it is the least burdensome and least intrusive alternative that fully meets the statutory requirements and need for the regulation. The alternatives considered by the Department, along with the reasoning by which the Department has rejected any of the alternatives considered, are discussed below.

1. Retain the regulation without amendment. This option was chosen because the current regulation provides the least onerous method for complying with the minimum requirements of the legal mandates.
2. Make alternative regulatory changes to those required by the provisions of the legally binding state or federal mandates. This option was not chosen because it could result in the imposition of requirements that place unreasonable hardships on the regulated community without justifiable benefits.
3. Repeal the regulation or amend it to satisfy the provisions of the legally binding state or federal mandates. This option was not chosen because the regulation is effective in meeting its goals and already satisfies those mandates.

Clarity of the Regulation

Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

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Family Impact Statement

Please provide a preliminary analysis of the potential impact of the regulation on the institution of the family and family stability including to what extent the regulation will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment: 4) increase or decrease disposable family income.

It is not anticipated that this regulation will have a direct impact on families. However, there will be positive indirect impacts in that the regulation will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.

Recommendation

Please state whether the agency is recommending the regulation be retained and the reasons such a recommendation is being made.

The regulation satisfies the provisions of the legally binding state or federal requirements and is effective in meeting its goals; therefore, it is recommended that the regulation be retained without amendment.

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